REMARKS/ARGUMENTS

Claims 1-4 and 6-24 are pending in the application; the status of the claims is as follows:

Claims 25-32 have been added.

Claims 1, 6, 20, and 21 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,926,159 to Matsuzaki et al ("Matsuzaki") in view of U.S. Patent No. 6,075,508 to Ono et al ("Ono").

Claims 2, 16, and 17 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Matsuzaki and Ono as applied to claim 1 above, and further in view of U.S. Patent No. 6,268,840 B1 to Huang ("Huang").

Claims 3 and 4 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Matsuzaki and Ono as applied to claim 1 above, and further in view of U.S. Patent No. 4,728,936 to Guscott et al ("Guscott").

Claims 7-9, 12, and 13 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Matsuzaki and Ono as applied to claim 1 above, and further in view of Japanese Published Application No. JP 8-035759 to Chikako ("Chikako").

Claims 10 and 11 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,952,990 to Inoue ("Inoue"), Matsuzaki, Ono and Chikako as applied to claims 1 or 7 above, and further in view of U.S. Patent No. 5,726,676 to Callahan, Jr. et al ("Callahan") and U.S. Patent No. 6,323,851 B1 to Nakanishi ("Nakanishi").

Claim 14 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Matsuzaki and Ono as applied to claim 1 above, and further in view of U.S. Patent No. 6,342,901 B1 to Adler et al ("Adler").

Claim 15 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Matsuzaki in view of Ono and further in view of U.S. Patent No. 6,008,787 to Kondoh ("Kondoh").

Claim 18 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Matsuzaki in view of U.S. Patent No. 6,233,027 B1 to Unno et al ("Unno") and further in view of Ono.

Claims 19, 23, and 24 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Matsuzaki in view of U.S. Patent No. 6,085,047 to Taka ("Taka").

Claim 22 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Matsuzaki and Ono as applied to claim 1 above, and in view of Taka.

Claims 1, 15, 18, and 19 have been amended. Support for the amendment is found, for example, at page 3, lines 23-26. Claim 24 has been amended to improve the form thereof. Support for new claims 25-32 is found, for example, at page 3, lines 17-22. These changes do not introduce any new matter.

35 U.S.C. § 103(a) Rejections

The rejection of claims 1, 6, 20, and 21 under 35 U.S.C. § 103(a), as being unpatentable over Matsuzaki in view of Ono, is respectfully traversed because the proposed combination fails to disclose all of the elements of the rejected claims.

Matsuzaki describes a ferroelectric liquid crystal display (FLCD). FLC molecules are aligned in a first or second stable state in accordance with a direction of an electric field applied to the liquid crystal. After removal of the electric field , the aligned state is maintained. According to Matsuzaki, in driving the FLCD, a sufficient time margin can be obtained in a continuous refresh driving cycle of the display screen (see column 1, lines 50-53). In other words, cyclic refresh driving of the display screen is necessary. Although

the cycle is long compared to cases of driving conventional liquid crystal displays, an FLCD cannot maintain a display state for periods as long as one day. Ono fails to supply the missing teaching.

It is therefore respectfully submitted that the proposed combination of Matsuzaki and Ono fails to teach, suggest, or disclose the invention of claim 1 which recites "a display section which uses liquid crystal with a memory effect sufficient to keep information displayed for at least a day without application of a voltage thereto." Accordingly, it is respectfully requested that the rejection of claim 1 under 35 U.S.C. § 103(a) as being unpatentable over Matsuzaki in view of Ono, be reconsidered and withdrawn.

Claims 6, 20, and 21 depend from claim 1 and, therefore, distinguish Matsuzaki in view of Ono for at least the same reasons as provided herein above in respect of claim 1. Accordingly, it is respectfully requested that the rejection of claims 6, 20, and 21 under 35 U.S.C. § 103(a) as being unpatentable over Matsuzaki in view of Ono, be reconsidered and withdrawn.

The rejection of claims 2, 16, and 17 under 35 U.S.C. § 103(a), as being unpatentable over Matsuzaki and Ono as applied to claim 1 above, and further in view of Huang, is respectfully traversed because the references fail to teach the elements claimed. Claims 2, 16, and 17 depend from claim 1 and, therefore, distinguish the combination of Matsuzaki and Ono for the reasons provided above regarding claim 1. Huang also fails to teach "a display section which uses liquid crystal with a memory effect sufficient to keep information displayed for at least a day without application of a voltage thereto." Accordingly, it is respectfully requested that the rejection of claims 2, 16, and 17 under 35 U.S.C. § 103(a) as being unpatentable over Matsuzaki and Ono as applied to claim 1 above, and further in view of Huang, be reconsidered and withdrawn.

The rejection of claims 3 and 4 under 35 U.S.C. § 103(a) as being unpatentable over Matsuzaki and Ono as applied to claim 1 above, and further in view of Guscott is

respectfully traversed because these claims depend from claim 1. As noted above in respect of claim 1, Matsuzaki and Ono fail to teach all elements of claim 1. Guscott also fails to teach "a display section which uses liquid crystal with a memory effect sufficient to keep information displayed for at least a day without application of a voltage thereto." Accordingly, it is respectfully requested that the rejection of claims 3 and 4 under 35 U.S.C. § 103(a) as being unpatentable over Matsuzaki and Ono as applied to claim 1 above, and further in view of Guscott, be reconsidered and withdrawn.

Claims 7-9, 12, and 13 also depend, either directly or indirectly, from claim 1. Therefore, these claims distinguish Matsuzaki and Ono as applied to claim 1 above. It is respectfully submitted that Chikako adds nothing pertaining to "a display section which uses liquid crystal with a memory effect sufficient to keep information displayed for at least a day without application of a voltage thereto." Accordingly, it is respectfully requested that the rejection of claims 7-9, 12, and 13 under 35 U.S.C. § 103(a) as being unpatentable over Matsuzaki and Ono as applied to claim 1 above, and further in view of Chikako, be reconsidered and withdrawn.

The rejection of claims 10 and 11 under 35 U.S.C. § 103(a) as being unpatentable over Inoue, Matsuzaki, Ono and Chikako as applied to claims 1 or 7 above, and further in view of Callahan and Nakanishi is respectfully traversed because Inoue, Callahan and Nakanishi fail to teach the claim element missing from the combination of Matsuzaki, Ono and Chikako as applied to claim 1 above. Specifically, the combination fails to teach an LCD display "which uses liquid crystal with a memory effect sufficient to keep information displayed for at least a day without application of a voltage thereto." Accordingly, it is respectfully requested that the rejection of claims 10 and 11 under 35 U.S.C. § 103(a) as being unpatentable over Inoue, Matsuzaki, Ono and Chikako as applied to claims 1 or 7 above, and further in view of Callahan and Nakanishi, be reconsidered and withdrawn.

Claim 14 depends from claim 1, and therefor distinguishes the combination of Matsuzaki and Ono for at least the same reasons as applied to claim 1 above. It is respectfully submitted that Adler fails to cure the deficient teachings of Matsuzaki and Ono in that it does not teach or suggest "a display section which uses liquid crystal with a memory effect sufficient to keep information displayed for at least a day without application of a voltage thereto." Accordingly, it is respectfully requested that the rejection of claim 14 under 35 U.S.C. § 103(a) as being unpatentable over Matsuzaki and Ono as applied to claim 1 above, and further in view of Adler, be reconsidered and withdrawn.

The rejection of claim 15 under 35 U.S.C. § 103(a), as being unpatentable over Matsuzaki in view of Ono and further in view of Kondoh, is respectfully traversed because the cited references fail to disclose, teach, or otherwise suggest the elements of claim 15. Specifically the references fail to teach or suggest "a liquid crystal display which uses liquid crystal with a memory effect capable of retaining displayed information thereon for at least one day without the application of a voltage" as required by claim 15. Accordingly, it is respectfully requested that the rejection of claim 15 under 35 U.S.C. § 103(a) as being unpatentable over Matsuzaki in view of Ono and further in view of Kondoh, be reconsidered and withdrawn.

The rejection of claim 18 under 35 U.S.C. § 103(a) as being unpatentable over Matsuzaki in view of Unno and further in view of Ono is respectfully traversed because the combination of Matsuzaki, Unno, and Ono fails to teach a "display section being capable of continuing to display information thereon for about one day without applying a voltage thereto." Accordingly, it is respectfully requested that the rejection of claim 18 under 35 U.S.C. § 103(a) as being unpatentable over Matsuzaki in view of Unno and further in view of Ono, be reconsidered and withdrawn.

The rejection of claims 19, 23, and 24 under 35 U.S.C. § 103(a), as being unpatentable over Matsuzaki in view of Taka, is respectfully traversed because the cited

references fail to disclose, teach, or suggest the elements of the rejected claims. For example, the references fail to teach a display device having "a display section which uses liquid crystal with a memory effect capable of displaying an image thereon for at least one day without the application of a voltage thereto." Claims 23 and 24 depend from claim 19. Accordingly, it is respectfully requested that the rejection of claims 19, 23, and 24 under 35 U.S.C. § 103(a) as being unpatentable over Matsuzaki in view of Taka, be reconsidered and withdrawn.

The rejection of claim 22 under 35 U.S.C. § 103(a), as being unpatentable over Matsuzaki and Ono as applied to claim 1 above, and in view of Taka, is respectfully traversed because the combination fails to disclose, teach or suggest the all elements of the rejected claim. Specifically, Matsuzaki and Ono fail to teach a "liquid crystal display device comprising: a display section which uses liquid crystal with a memory effect sufficient to keep information displayed for at least a day without application of a voltage thereto. . . ." Taka also does not teach or suggest the claimed display section. Accordingly, it is respectfully requested that the rejection of claim 22 under 35 U.S.C. § 103(a) as being unpatentable over Matsuzaki and Ono as applied to claim 1 above, and in view of Taka, be reconsidered and withdrawn.

New claims 25-32 depend from one of independent claims 1, 15, 18, and 19. They, therefore, distinguish the art of record for at least the same reasons as provided herein above regarding their respective base claims.

CONCLUSION

Wherefore, in view of the foregoing amendments and remarks, this application is considered to be in condition for allowance, and an early reconsideration and a Notice of Allowance are earnestly solicited.

This Amendment increases the total number of claims to 31, but does not increase the number of independent claims and does not present any multiple dependent claims. Having previously paid the fee for 24 claims, a fee is due for the 7 additional claims. A Response Transmittal and Fee Authorization form authorizing the amount of $126.00 to be charged to Sidley Austin Brown & Wood LLP's Deposit Account No. 18-1260 is enclosed herewith in duplicate. However, if the Response Transmittal and Fee Authorization form is missing, insufficient, or otherwise inadequate, or if a fee, other than the issue fee, is required during the pendency of this application, please charge such fee to Sidley Austin Brown & Wood LLP's Deposit Account No. 18-1260.

Any fee required by this document other than the issue fee, and not submitted herewith should be charged to Sidley Austin Brown & Wood LLP's Deposit Account No. 18-1260. Any refund should be credited to the same account.

If an extension of time is required to enable this document to be timely filed and there is no separate Petition for Extension of Time filed herewith, this document is to be construed as also constituting a Petition for Extension of Time Under 37 C.F.R. § 1.136(a) for a period of time sufficient to enable this document to be timely filed.

Any other fee required for such Petition for Extension of Time and any other fee required by this document pursuant to 37 C.F.R. §§ 1.16 and 1.17, other than the issue fee, and not submitted herewith should be charged to Sidley Austin Brown & Wood LLP's Deposit Account No. 18-1260. Any refund should be credited to the same account.

Respectfully submitted,

By: _____
Michael J. DeHaemer
Reg. No. 39,164
Attorney for Applicants

MJD/llb:jkk
SIDLEY AUSTIN BROWN & WOOD LLP
717 N. Harwood, Suite 3400
Dallas, Texas 75201
Direct: (214) 981-3335
Main: (214) 981-3300
Facsimile: (214) 981-3400
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